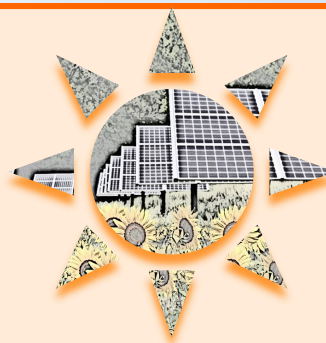


Carroll County, Maryland Community Solar Zoning Text Amendment



§158.153 (E) Solar Energy Generating Systems, Community Solar Energy Generating Systems (CSEGS) in Agricultural Zones

Overview of Carroll County Community Solar (CSEGS) Requirements

Definition: Definition given in Maryland Annotated Code, Public Utilities Article, § 7-306.2 as of July 1, 2020.

Location:

- ⊗ Principal permitted on remaining portions of five acres or greater in “A” Agricultural Zoning District.
- ⊗ 20-acre maximum for solar usage.
- ⊗ Only existing remaining portions with plats recorded as of July 1, 2020, are eligible.

Easement: Requires permanent easement extinguishing any additional residential and non-agricultural development on remaining land of five acres or greater to be granted to County upon installation of solar facility.

Site Plan: Requires Planning & Zoning Commission review and approval.

Environmental Resources:

- ⊗ No clearing of forested areas.
- ⊗ Not located within or impede stream buffer, floodplain, or wetland.

Ag Co-Location: Requires...

- ⊗ Maryland’s **Solar Generation Facilities Pollinator-Friendly Designation, and/or**
- ⊗ Planted, managed, and maintained for grazing of farm animals, apiaries (beekeeping), or crops.
- ⊗ Property owner responsible to control and suppress noxious weeds and invasive plants on site and prevent spread to surrounding farmland.

Landscaped Buffer:

- ⊗ Required to provide year-round screening of the CSEGS from residential uses on contiguous properties and public rights-of-way.
- ⊗ May incorporate plantings and/or berms that blend in with the natural landscape.
- ⊗ May be placed within the setback.
- ⊗ Any perimeter fencing to be inside of landscaped buffer.

Bulk & Height Requirements:

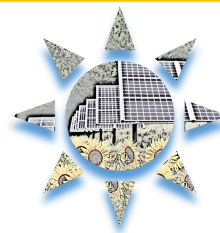
- ⊗ Minimum setback = 40 feet from property line and adjoining property lines for infrastructure and equipment.
- ⊗ Maximum height = 15 feet above existing grade.

Abandonment & Decommissioning: Decommissioning plan required.

- ⊗ Solar panels not in use for 180 consecutive days must be decommissioned and removed.
- ⊗ Requires a public works agreement (PWA) with County and bond/guaranty to ensure proper decommissioning and funding for removal. ☀

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What is Community Solar?



Maryland Public Utilities Code § 7-306.2 defines a CSEGS as a solar energy system that:

- ☼ Is connected to the electric distribution grid serving the state;
- ☼ Is located in the same electric service territory as its subscribers;
- ☼ Is attached to the electric meter of a subscriber or is a separate facility with its own electric meter;
- ☼ Credits its generated electricity, or the value of its generated electricity, to the bills of the subscribers to that system through virtual net energy metering (see “Net Metering” below for more information);
- ☼ Has at least two subscribers;
- ☼ Does not have subscriptions larger than 200 kilowatts (kW) constituting more than 60 percent of its subscriptions;
- ☼ Has a generating capacity that does not exceed two megawatts (MW), as measured by the alternating current rating of the system’s inverter; and
- ☼ May be owned by any person.

Customers subscribe to a portion of the solar energy generated by the CSEGS, and they typically receive an electric bill credit for electricity generated by their share of the CSEGS. A customer’s subscription cannot exceed 200% of the customer’s baseline annual energy usage. Subscribed energy in excess of annual use is paid out at a lower rate than the subscribed cost. Community solar provides access to solar energy for those who cannot or choose not to install solar on their own property or where they live.

In Carroll County, a CSEGS is considered a commercial facility. The definition of a CSEGS for purposes of Carroll County zoning is the definition in State law as of July 1, 2020. If any requirements in State law change, the Board of County Commissioners may decide to keep the requirements that were in place as of July 1, 2020, or amend the zoning code to reflect any desired changes. ☼

Maryland’s Community Solar Pilot Program

According to the Maryland Public Service Commission (PSC), the **community solar pilot program** will:

- ☼ Provide access to solar-generated electricity – in a manner similar to rooftop solar and net metering – for all Maryland customers without requiring property ownership;
- ☼ Incentivize solar companies to provide service to low- and moderate-income customers;
- ☼ Set aside program capacity for each area of the state with a statewide cap at about 418 MW. About 125 MW is set aside for projects focused on low- and moderate-income customers;
- ☼ Attract new investment in Maryland’s renewable infrastructure and green economy;
- ☼ Allow renters to contract for solar energy with the same benefits as rooftop owners;
- ☼ Create separate program capacity for small systems and systems built on brownfields, parking lots, or industrial areas;
- ☼ Allow smaller and rural service territories to make use of existing solar facilities while encouraging construction of new systems in the urban and suburban areas of Maryland;
- ☼ Include significant consumer protections, including prohibition against unreasonable fees and clear contract disclosure requirements; and
- ☼ Allow the Commission staff to collect necessary data to study the impact on Maryland’s electricity grid over the seven-year pilot program. ☼



Concepts Strived for Balance

- ☼ Expanding community solar opportunities,
- ☼ Protecting farmland and the county’s investment in agricultural land preservation,
- ☼ Co-locating with agricultural use, and
- ☼ Addressing common concerns with solar in agricultural areas. ☼

Why Amend the Zoning to Allow CSEGS in the Ag Zone?

Maryland's Renewable Energy Portfolio Standard was enacted in 2004 to decrease the state's reliance on fossil fuels and increase the amount of energy generated by renewable sources, such as solar. Energy suppliers are required to generate 50 percent of their energy from renewable energy sources by 2030.

To increase the percentage of energy generated by solar in the state and widen access to renewable energy for residents and small businesses, the Maryland General Assembly passed **legislation** (Senate Bill 398/House Bill 1087) in 2015 to allow community solar projects (known as "community solar energy generating systems" or CSEGS) as part of a pilot study, which currently ends in 2024. A CSEGS is a subscription-based facility, and the organizations offering the subscriptions — "subscriber organization" — must be established during this pilot period. While no new projects will be accepted into the program after the end of the pilot period, a subscriber organization can continue to operate a community solar project that was established during the program until September 30, 2044, or 25 years after the organization has been authorized to operate – whichever comes later. Among other things, the State's community solar pilot program is intended to increase access to solar energy, particularly for residents and small businesses.

The state expects local governments to play a critical role in the renewable energy process. While the county has the authority to plan and regulate its own land use and development, providing clarity as to where these solar projects can be sited may help to minimize the possibility that the Maryland PSC will override local plans by demonstrating that adequate opportunities are available for solar sites, that input from stakeholders is sought, and that clear requirements are in place.

Prior to adopting this amendment, community solar facilities would have only been permitted in commercial and industrial zones. Co-location with other uses in these zones is a top priority through solar development on rooftops, parking lot canopies, and brownfields and cannot be dismissed simply because it is more expensive. However, other factors may limit these opportunities. Agriculture and preservation of land for agriculture are long-standing goals, in which the county has made significant investment. However, allowing some limited solar development on certain agricultural lands is intended to demonstrate a good-faith effort to provide adequate solar siting opportunities and discourage state-mandated siting in the county. Solar development in these areas could also provide benefits to landowners and potential subscribers, as well as increase county tax revenues. ☀️

Amendment Drafting & Adoption Process

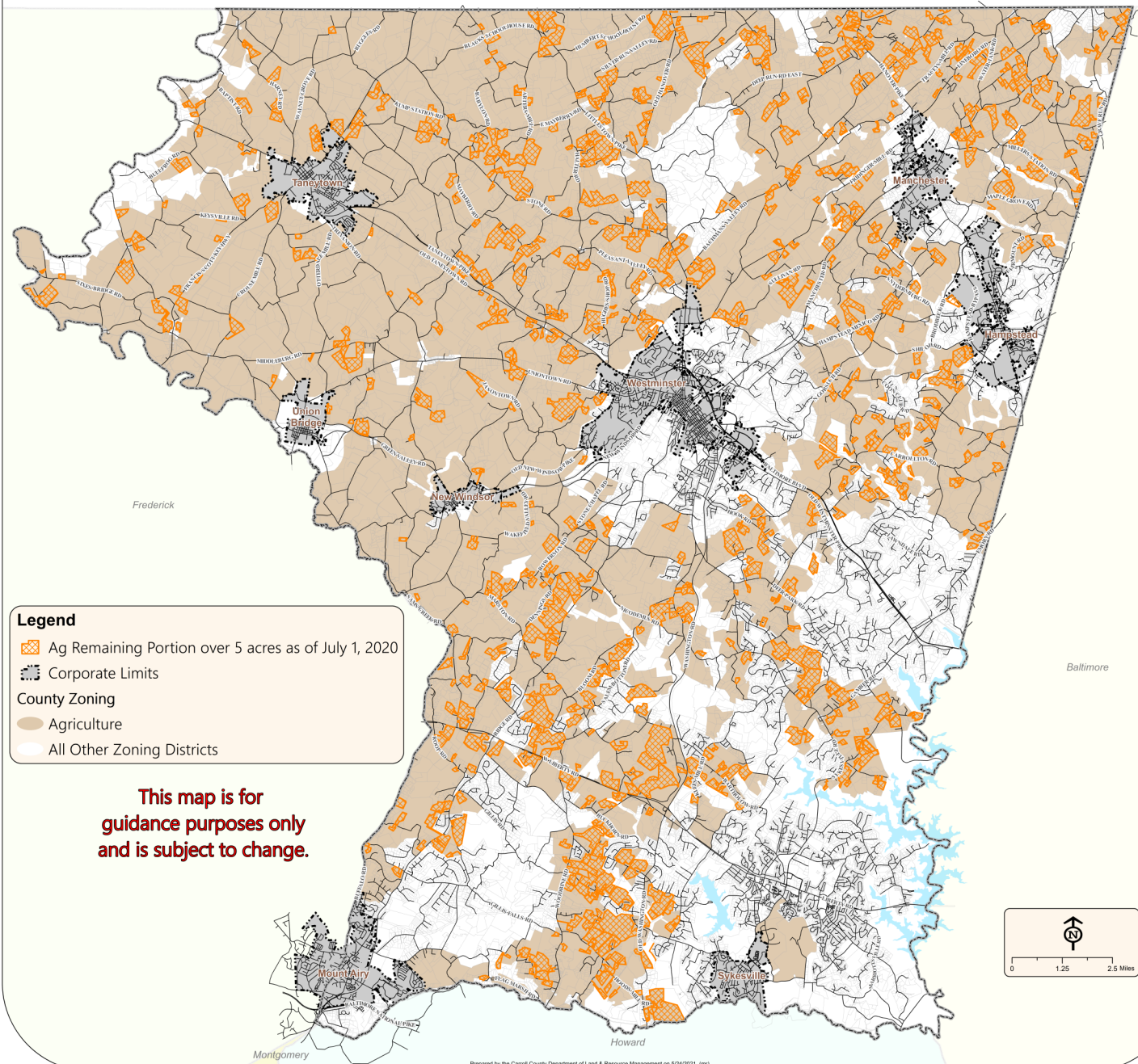
- ☀️ **Spring 2020** ⇒ Board of County Commissioners (the "Board") directed staff to develop a proposal for a zoning text amendment that would expand opportunities for community solar development using remaining portions in the "A" Agricultural District (zoning), including requiring a permanent easement as part of the process.
- ☀️ **Fall 2020** ⇒ Board reviewed initial concepts and directed staff to solicit feedback. Property owners, agricultural groups, and solar industry groups provided feedback with specific concerns and suggested alternatives related to the initial proposed concepts.
- ☀️ **December 2020** ⇒ Board reviewed feedback and revised proposed concepts, including expanding to all remaining portions five acres and greater. Directed staff to draft code amendment and proceed to review with the Carroll County Planning & Zoning Commission ("Planning Commission").
- ☀️ **Winter 2021** ⇒ Planning Commission reviewed the proposed amendment at five meetings between January 19 and March 16, 2021. Planning Commission made its final recommendation to the Board on March 16, 2021.
- ☀️ **Spring 2021** ⇒ The Board held a public hearing on the proposed code amendment on April 29, 2021, and held the record open for 10 days. The proposed code and public hearing notice were available on the Community Solar Zoning Text Amendment webpage, and notice was published in the paper on April 15 and 22, 2021. The Board adopted the amendment on May 13, 2021.
- ☀️ **Throughout** ⇒ All information regarding the proposed concepts was available on the Community Solar Zoning Text Amendment webpage. Feedback was taken throughout the process. ☀️

Properties Eligible for Community Solar Development in the Ag Zone

CSEGSs are permitted on remaining portions of five acres or greater in size in the Agricultural District that existed as of July 1, 2020 (recorded plat). However, just because a property is eligible to be considered for community solar development does not mean that it would be found suitable for this type of development by a solar developer.

In the Agricultural District, **remaining portions** are the land remaining after residential subdivision lots have been created from a legally established parcel of land through the subdivision process. [Carroll County Zoning §158.002 and Development and Subdivision of Land §155.091] ☀️

Carroll County Ag Remaining Portions
5 Acres and Greater
as of July 1, 2020



This map is for guidance purposes only. A property's status as a remaining portion must be verified with the Bureau of Development Review.

Factors Affecting Suitability

Just because a parcel is eligible does not mean it is suitable for CSEGS development. There are many other factors that affect suitability. Generally, the *solar developer* will assess a property and the ability or capacity of the distribution lines (based on coordination with the utility company) to determine if a property is a good fit based on these factors. Some of these factors include (but are not limited to):

- ⊗ Proximity to three-phase distribution lines,
- ⊗ Capacity of the distribution lines,
- ⊗ Site constraints, such as slopes, sun exposure, natural resources, etc.,
- ⊗ Cost,
- ⊗ Maryland PSC approval, and
- ⊗ Utility company approval.

Three-Phase Distribution Lines

A CSEGS needs access to three-phase distribution lines to ensure the lines can accommodate the high energy loads. The closer the site is to these lines, the better. While not full-proof, the easiest way to check is to look at the lines that serve your property. Generally, there are three lines on top.



State policy also impacts the extent of solar development that may occur. As of May 2021, some of these policies included:

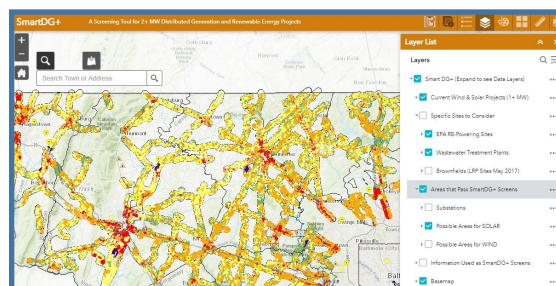
- ⊗ A solar project cannot adjoin another solar project or cross parcel lines;
- ⊗ Multiple community solar projects owned by the same entity or affiliate cannot be located on the same or adjacent properties unless they are:
 - on the rooftops of buildings,
 - in areas zoned for industrial use,
 - on a brownfield (but with a combined capacity not exceeding 6 MW),
 - over parking lots or roadways, or
 - on a multi-level parking structure.
- ⊗ A parcel cannot be subdivided to build solar if it has been subdivided within the past five years; and
- ⊗ The maximum capacity of a community solar project is two megawatts (MW). ☀

Remaining Portions >=5 AC

Fun Facts

Acres	Total # of Parcels	Total Acreage
5-10	198	1,425
10-20	161	2,318
20-40	180	5,197
40-60	89	4,357
60-80	41	2,892
80-100	12	1,068
100-150	26	2,964
>150	13	2,607
TOTALS	720	22,827

- ⊗ **Roughly 16% of the eligible remaining portions still have limited residential subdivision potential.** To be a remaining portion, at least one residential lot must already have been subdivided from the original parcel. However, some remaining portions may not have divided all of the lots to which they are entitled based on zoning. These property owners must choose whether to pursue community solar development or retain their residential subdivision potential. Under current code, they cannot do both.
- ⊗ **Around 73% of eligible remaining portions are within 1 mile of the needed distribution lines needed to accommodate the energy generated.** The closer a potential site is to the three-phase distribution lines, the less it will cost to access those lines. The lines also need to have capacity available to accommodate the energy that will be generated.
- ⊗ **Explore Maryland Department of Natural Resources' online Smart DG+ interactive screening tool for renewable energy projects for interesting data on solar facility siting.** ☀



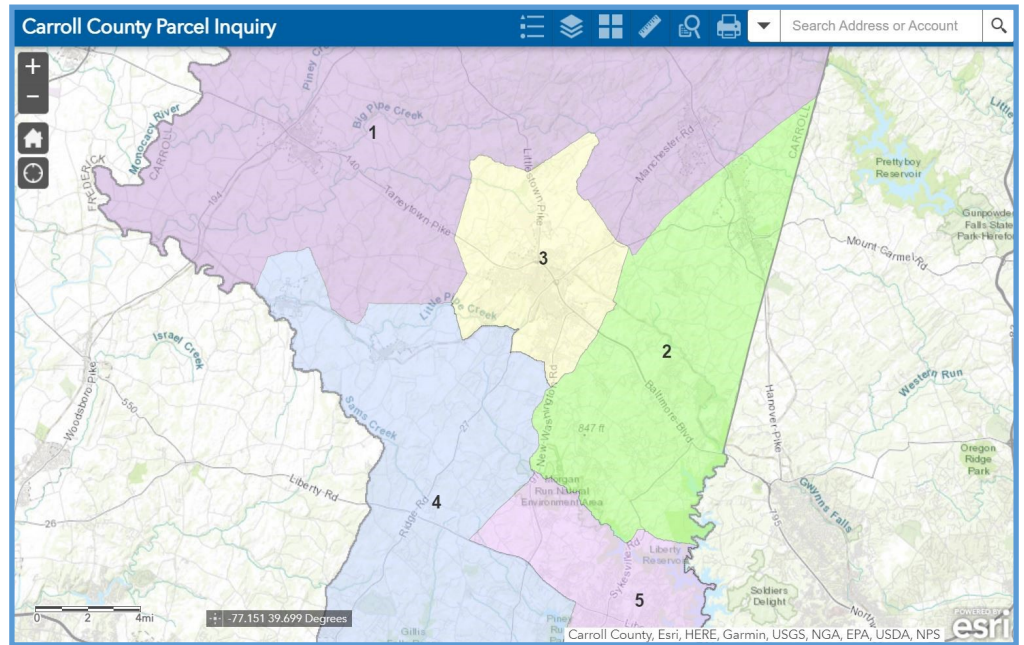
How to Check if a Property is a Remaining Portion

To check whether a parcel is a remaining portion or not, crosscheck the map of potentially eligible parcels for community solar development (see link at bottom of page) on the **Community Solar Zoning Text Amendment** webpage against the Parcel Inquiry map on the **County's GIS Interactive Maps** website (see link at bottom of page).

Step 1: Zoom into a parcel on the map of potentially eligible parcels. The parcel lines will appear, making it easier to view individual remaining portions.

Step 2: Go to the **Parcel Inquiry map**. After accepting the terms and conditions, zoom into that area of the county until the parcel lines are visible. At that point, find the parcel of interest.

Step 3: Verify if the parcel is a remaining portion by checking some of the parcels around it. If, when double clicking on a parcel, an option to select "More Info" next to "Plat Link" is showing, this parcel may have originally been divided from what is now a remaining portion. Click on the "More Info" link next to "Plat Link," and open the plat file. The plat will show which parcel is the remaining portion. (The remaining portion itself will not have a subdivision plat.)



Carroll County Ag Remaining Portions Five Acres and Greater as of July 1, 2020 ⇨ Map of Potentially Eligible Parcels for Community Solar:

This is the same map seen on Page 4 but provides the ability to zoom in to see more detail.

<https://carrollcountymd.gov/communitysolar>

GIS (Geographic Information System) Interactive Maps, Parcel Inquiry:

For guidance purposes, this data can be compared against the properties on the map of potentially eligible properties. Remaining portions must be verified with the Bureau of Development Review prior to submitting a site plan for review.

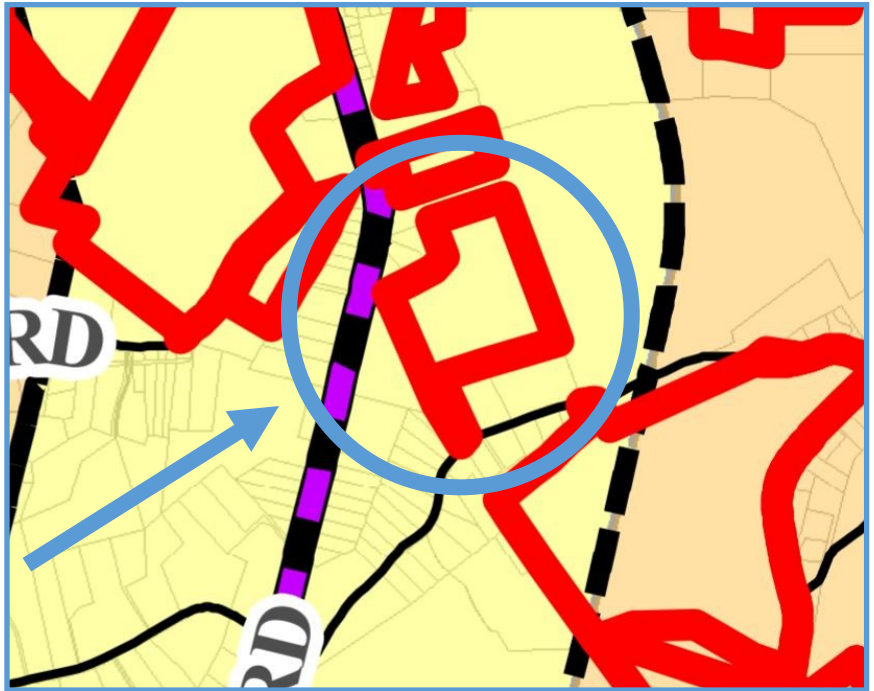
<https://carrollco-md.maps.arcgis.com/apps/webappviewer/index.html?id=47e6a798c5184f5d8c916abb9e8a5c4d>

GIS Parcel Data

To access GIS data, the GIS parcel file can be downloaded from the county's data download site at <https://data-carrollco-md.opendata.arcgis.com/>. In the search bar, search "parcels." The user will be taken to the download page for parcels where the dataset can be downloaded. This data contains the account ID, map and parcels, and the State Department of Assessment and Taxation (SDAT) link. While a license agreement is not needed, a link on the page provides license details regarding how the content may be used.

Property owners can verify their properties are remaining portion with a plat recorded by July 1, 2020, by contacting the Bureau of Development Review at 410-386-2722 or DevelopmentCoordinators@carrollcountymd.gov. ☀

EXAMPLE...



REMAINING PORTION MAP
1" = 400'

OLD HANOVER ROAD

LOT-1: 1.449 ACRES
LOT-2: 1.962 ACRES
LOT-3: 2.304 ACRES

GREENFIELDS DRIVE - USED
30' SETBACK FOR DRIVE FROM REMAINING PORTION
SPRINKLER FOR LOT 1 & 2 - 1" MINIMUM CLEARANCE

SEE DETAIL

OTHER LOTS OF
DAVID C. BULLOCK &
MARY LOU BULLOCK, M/W
L.W.S. 2778/90
1.12 ACRES
AREA = 34,397 SQ FT

PLATBOOK L.W.S. No. 9/24/03 PAGE 47 DATE 198

MARYLAND STATE
SOUTH (NAD 1983/PM)

GENERAL NOTES

1. Current Title Reference
Owner - David C. Bullock & Mary Lou Bullock, S/W
Deed Reference - Liber LWS 2778 Folio 900
Date - January 13, 2002
Grantor - Carl W. Saine & Jane S. Saine, M/W
2. No grading, filling or construction shall be permitted which obstructs or inhibits the surface flow of water within drainage and utility easements as shown herein.
3. Any modification or plat reassembly shall be subject to approval by the Carroll County Planning and Zoning Commission.
4. Nothing shown or stated on this plat shall create a covenant or restriction of title.
5. Water and Sewerage Facilities - If and when public/community water and/or sewerage facilities become available to the site in this subdivision, the lot owners shall be required to connect to the system in accordance with applicable law.
6. Agriculture as the preferred use in the AGRICULTURAL District. All AGRICULTURAL operations shall be permitted at any time, including the operation of farm machinery and any AGRICULTURAL use shall be subject to restriction because it interferes with other uses permitted in this district.
7. This entire tract is located within the AGRICULTURAL District established by the Carroll County Zoning Ordinance. The regulations for the AGRICULTURAL District provide further subdivisions of the area designated on this plat as "REMAINING PORTION", and the lots shown herein, for the purpose of creating additional lots for residential use.
8. REMAINING PORTION 34,397 sq. ft. Liber LWS 2778 Folio 900
9. There are 20 foot wide drainage and utility easements shown on all non-served footage lots and other easements as specifically shown herein.
10. The coordinate values shown on this plat area based on the following Carroll County Control Station "HANOVER" to Point 5 - N 17°45'18" E 95.12 40'
11. The Iron Carroll County Survey Control Station "HANOVER" to Point 5 - N 17°45'18" E 95.12 40'
12. Lots 1, 2 & 3 shall utilize the use-in-common driveway as shown herein. A declaration of easement obligations setting forth the responsibilities for maintenance of the use-in-common driveway is intended to be recorded simultaneously herewith.
13. The area shown as Parcel 'A', containing 0.172 acres is to be conveyed to the Carroll County Commissioners by deed to be recorded simultaneously herewith.

North	East
1 744579 188	1311654 263
2 744571 425	1312244 882
3 744413 246	1312241 490
4 744309 608	1312146 330
5 744016 117	1307232 276
6 744267 342	1311941 645
7 744290 400	1311596 033

Data Tabulation:
Number of building sites - 3
Total Area of Lots - 5.765 acs
Area of Road Widening - 0.172 acs
Total area of Plat - 3.425 acs

Parcel 'A' - 0.172 acs to be deeded to the Commissioners of Carroll County

DATE: 3-27-03

CARROLL COUNTY PLANNING & ZONING COMMISSION APPROVAL

BY: *[Signature]* DATE: 4/2/03

CARROLL COUNTY DEPARTMENT OF PUBLIC WORKS FOR UTILITIES APPROVAL

BY: *[Signature]* DATE: 3-31-03

CARROLL COUNTY HEALTH DEPARTMENT APPROVAL

BY: *[Signature]* DATE: 4/2/03

CERTIFICATE

THE OWNERS TO THE BEST OF MY BROTHER'S KNOWLEDGE AND THE SURVEYOR DO HEREBY CERTIFY THAT THE LAND SHOWN HEREON HAS BEEN Laid OUT AND THE PLAT PREPARED IN COMPLIANCE WITH SECTION 3-04 OF THE REAL PROPERTY ARTICLE OF THE ANNOTATED CODE OF MARYLAND, 2014 AS AMENDED, PERTAINING TO THE PREPARATION OF RECORD PLATS.

David C. Bullock 3/26/03
OWNER Mary Lou Bullock 3/26/03
Surveyor: *[Signature]* DATE: 3/26/03
REGISTERED PROFESSIONAL SURVEYOR No. 258

OWNER / DEVELOPER
David C. and Mary Lou Bullock
4379 Laneside Lane
Union Bridge, MD 21791

REVISIONS

A. L. S. Inc.
SURVEYORS & LAND PLANNERS
104 EAST MAIN STREET
WESTMINSTER, MARYLAND 21157
410-857 - 0822
SCALE: 1" = 100' DATE: 3-3-2003
JOB No. #13-01-22
CARROLL COUNTY FILE No. M-02-028

471198

Agriculture Co-Location is Required

One of the most common community concerns with allowing solar facilities on agricultural land is the loss of farmland. To help mitigate or prevent the loss of agricultural land, the Code requires that the area under the solar panels continue to be used for agricultural purposes. Using the same acreage, or the land on which the solar is located, for both solar facilities and agricultural uses is known as “co-location” (sometimes referred to as “dual use”). Benefits of co-location include improving soil health, reducing evaporation and water use, recharging of nutrients, and extending the growing season of certain plants.

The Carroll County Zoning Code requires the site to be designated and maintained as pollinator friendly under Maryland’s Solar Generation Facilities Pollinator-Friendly Designation program, as defined by MD Natural Resources Code § 3-303.1, OR any land on which the CSEGS is located that is not designated as pollinator friendly must be planted, managed, and maintained in a manner suitable for grazing of farm animals, apiaries, or crops. The property owner/developer may choose which of these uses will be co-located with the solar panels, or the site can be split between these uses.

Maryland Solar Generation Facilities Pollinator-Friendly Designation

According to pollinator.org (4/6/2021), approximately 75% to 95% of all flowering plants require pollination to produce crops, including most fruits, vegetables, and grains. There is growing concern over the loss of pollinator species and their habitat. Providing pollinator-friendly wildflowers and plantings under solar panels creates habitat for the pollinators that are beneficial for and needed by Carroll County crops and backyard gardens. Pollinator-friendly habitats also provide many other benefits, such as:

- ⊗ stabilize the soil,
- ⊗ improve water and soil quality,
- ⊗ serve as windbreaks,
- ⊗ reduce air temperatures,
- ⊗ improve aesthetic appeal, and
- ⊗ remove carbon from the atmosphere.

In May 2017, the Pollinator-Friendly Designation Program bill (**SB 1158**) was signed by Governor Larry Hogan. This bill established a pollinator-friendly designation program for commercial ground-mounted solar facilities. If a property owner and/or solar developer choose to pursue the Pollinator-Friendly Designation, all requirements of **Maryland’s Solar Generation Facilities Pollinator-Friendly Designation** program (<https://dnr.maryland.gov/pprp/Pages/pollinator.aspx>) must be met and maintained. ☀



Suitable for Grazing of Farm Animals, Apiaries, or Crops

Grazing of animals, apiaries, or planting of crops under the solar panels is required as an alternative to, or in tandem with, maintaining a Pollinator-Friendly Solar Designation. The area must be planted, managed, and maintained in a manner suitable for these uses.

Solar **grazing** is the “practice of grazing livestock on solar farms. Sheep are the most common solar grazing animals, as they are the best-suited species. Sheep are naturally suited to the job of solar grazing. They enjoy the shade of the solar panels on hot days, napping and grazing where humans would struggle to reach. They are resourceful foragers, walking to search for vegetation that might otherwise become a shady nuisance for the solar company.” (*American Solar Grazing Association, <https://solargrazing.org/what-is-solar-grazing/>, April 7, 2021*)

Apiaries are another option. An apiary is an area for beekeeping and typically includes a collection of hives. Apiaries do not typically need a great deal of space. Therefore, this use would likely be combined with pollinator-friendly plantings, grazing, and/or crops.



Crops, in this context, refers to plants that can be grown and harvested, typically fruits, vegetables, grains, or tubers (ex. potatoes). Large-scale, single crops that rely on heavy machinery would not be feasible crops under solar panels. However, crops do not need to be row crops planted and/or harvested with machines to be considered crops. Depending on the type of crops, panels may need to be spaced out to allow for more sunlight to reach the plants. This could impact the total land area needed for the panels.

Tomatoes, peppers, chard, kale, and herbs are commonly grown under solar panels. Community-supported agriculture (CSA) could be a possible use if the solar company is amenable and the use is approved by the Planning Commission. ☀️



A Landscaped Buffer is Required

The aesthetics of solar panels on farmland is a common community concern with solar development in agricultural areas. Co-location of agricultural uses and/or pollinator habitat is one step toward creating a more desirable aesthetic. Another step toward addressing visual impact is creating a landscaped buffer to screen the panels from the most significant viewpoints.

A CSEGS is required to include a landscaped buffer to screen it from residential uses on contiguous properties and public rights-of-way. When the site plan is submitted, it must include a detailed landscaping plan, which includes the type of plantings, location, and spacing to result in year-round screening from the time of installation.

Rather than the manicured landscaping that you might find in a commercial area, the landscaped buffer is intended to blend with the natural landscape. To achieve this, solar developers are expected to use earthen berms and native trees and shrubs to create a visual buffer. The buffer must screen year-round from public rights-of-way (such as public roads) and adjoining existing residential uses. Trees will most likely need to be evergreens to provide year-round screening if earthen berms are not used. Use of the existing topography is the preferred first choice for screening, as

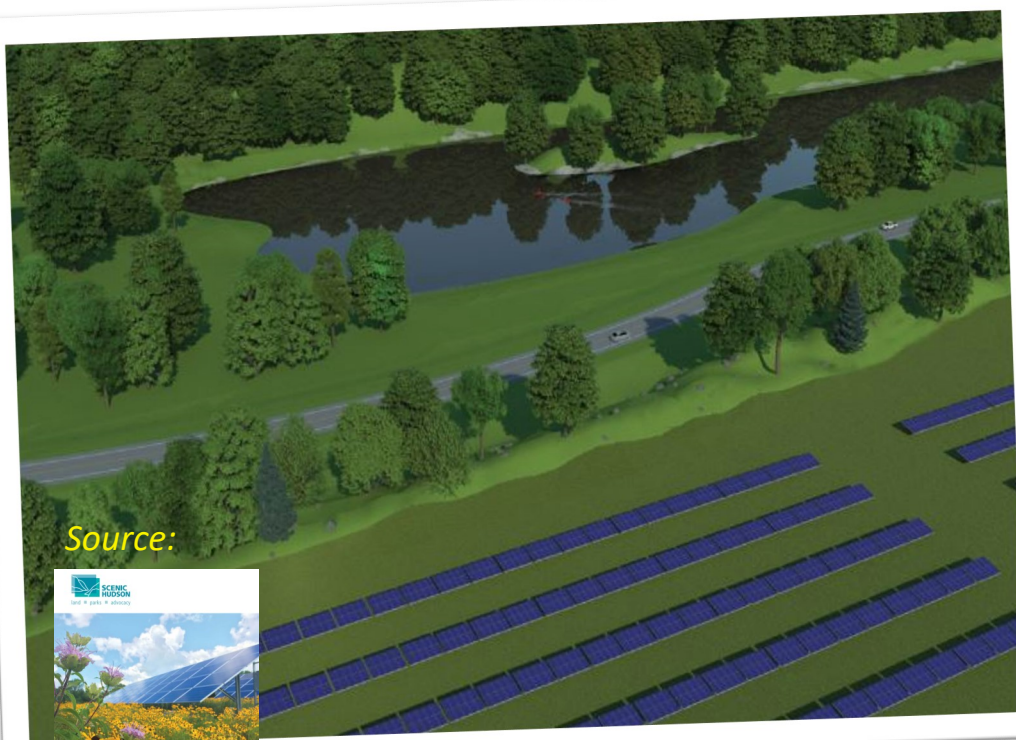
this will also help minimize grading and moving of topsoil.

The solar infrastructure must be setback a minimum of 40 feet from property lines. However, since aesthetics are the primary impact of this type of use, the landscaped buffer is allowed to be located within the setback area. This means it could be closer to the property line than the solar infrastructure.

While fencing is not required by the Code, if the solar developer wishes to install fencing, it must be located on the “inside” of the buffer – the same side as the panels. ☀️



A cutaway diagram shows how a large-scale solar array can be made invisible from roads or other public vantage points. It demonstrates several techniques for minimizing and mitigating visual impacts from large-scale solar projects: keep facility components at low profile, and site at a lower elevation on the property; design the site to take advantage of natural topographic components at low profile, and site at a lower elevation on the property; design the site to take advantage of natural topographic components and vegetative screening and setbacks, such as vegetation and berms along a roadway; locate inverters and other infrastructure on the site where they will have least visual impact; and avoid use of overhead interconnection lines, which can mar an otherwise natural landscape.



Source:



A Permanent Easement is Required on the Rest of the Remaining Portion

Why Remaining Portions?

Operating since 1980, Carroll County’s **Agricultural Land Preservation** (aka “Ag Pres”) has preserved more than 740 farms encompassing over 75,500 acres. In fall 2020, Carroll County reached the milestone of 75,000 acres preserved. This is 75% of the 100,000-acre goal, which is the amount of land targeted specifically at maintaining the long-term viability of farming in the county.

Since agricultural land preservation has been a long-standing goal and the county has made a significant investment in reaching that goal, the potential impact of community solar projects on agricultural land needed to be mitigated and balanced with the benefits.

A common concern voiced through feedback was the potential future expansion of these solar facilities. To mitigate the potential impact on agricultural land and operations and limit potential for future expansion, community solar development on any remaining portion is limited to a maximum of 20 acres. In addition, the property owner is required to donate a conservation easement on the portion of the property that is not developed for community solar.

Remaining portions were chosen for several reasons. Properties that are remaining portions have already taken advantage of and received the benefit of their residential development rights. These properties are still able to develop any of the other permitted uses in the Agricultural District (“Ag District”). Using only parcels that are not eligible for Ag Pres removes pressure on Ag Pres-eligible properties to develop solar rather than participate in the program. Using remaining portions adds to the inventory of potential land for preservation.

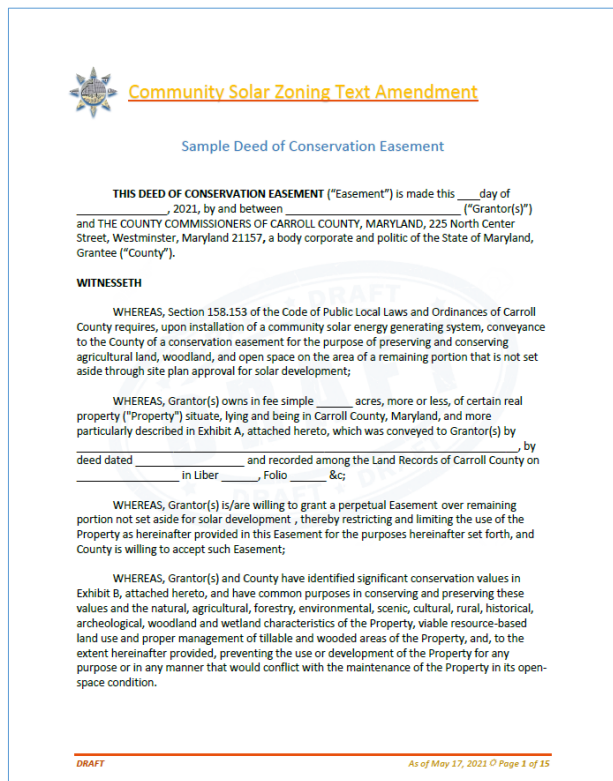
Conservation Easement Required on Rest of Remaining Portion

Until this amendment was adopted, community solar development was not permitted in the Ag District. Adoption of this amendment provides these property owners with another option for their property. They can choose to develop community solar, but the rest of the property will be under easement and not be able to pursue non-agricultural development. OR... If they want to be able to develop non-agricultural uses permitted in the Ag District on all of the property, they will have to forego solar development.

The area for solar development would not be under easement. Therefore, if the solar facility was removed, that area would still be available for other non-agricultural uses permitted in the Ag District.

The easement requirement provides a balance between the needs of the property owner and the needs of the community. It also will contribute to preserved acreage, consistent with the Carroll County Master Plan goals and the County’s Agricultural Land Preservation goals. The easement, which is effective in perpetuity, limits development of future uses on that portion of the property to agricultural uses permitted in the Ag District.

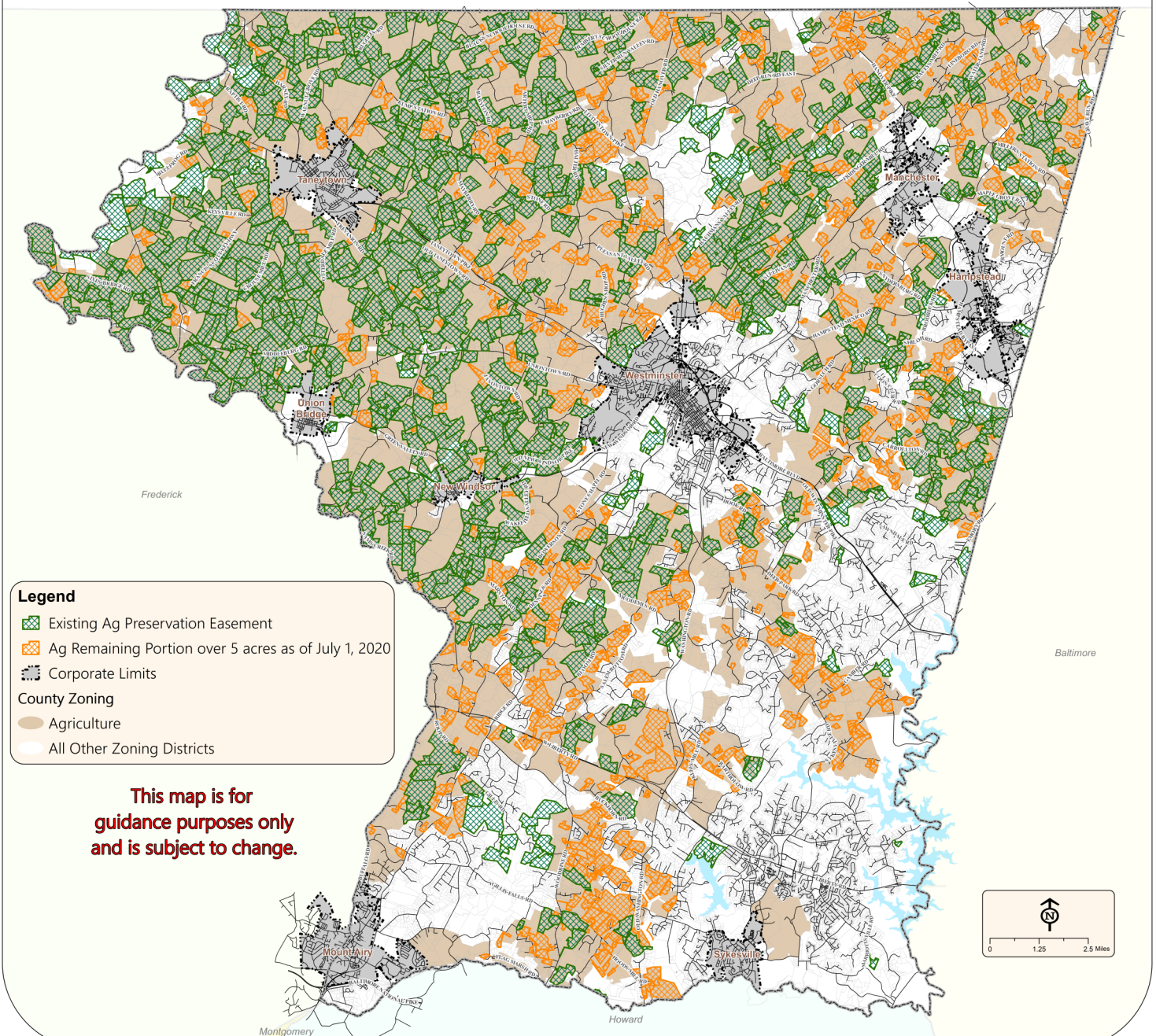
A sample deed of conservation easement is available on the [Community Solar Zoning Text Amendment webpage](#). ☀️



Agricultural Land Preservation Easements AND Remaining Portions Five Acres or Greater in the Agricultural District as of July 1, 2020

Carroll County's **Agricultural Land Preservation** effort is the most successful in the State of Maryland, preserving more farms and more acres through the purchase of land preservation easements than any other county in Maryland. Carroll County's program also ranks among the nation's top five similar programs administered by local governments in the United States. Carroll's program has preserved more than 740 farms encompassing over 75,500 acres. In fall 2020, Carroll County reached the milestone of 75,000 acres preserved. This is 75% of the 100,000-acre goal, which is the amount of land targeted specifically at maintaining the long-term viability of farming in the county. ☀

Carroll County Ag Preservation Easements
with Ag Remaining Portions 5 Acres
and Greater as of July 1, 2020



Frequently Asked Questions Regarding the Conservation Easement

FAQs

☀ Will the property be able to keep any of its residential development rights?

As the Code is currently written, any existing residential subdivision rights on the remaining portion will be retained. However, they cannot be constructed on the portion of the property under easement. If the solar facilities are removed, that area would be available to develop those lots, subject to approval under the then applicable subdivision regulations and other zoning and Health Department requirements. Accessory dwelling units up to 1,000 square feet would be permitted, subject to the requirements of Zoning Code Section 158.071.02(A)(8). If the remaining portion is unimproved or does not have a dwelling on it AND would otherwise be permitted to construct a dwelling without the easement, construction of a principal dwelling on the area under easement would be allowed by the easement.

☀ Does the easement have to be permanent?

Zoning Code Section 158.153(E)(1)(d) says “Upon installation of the CSEGS, a **permanent** easement shall be granted to the County on the portion of the remaining portion not set aside for solar development, where the acreage of land not set aside for solar development is 5 acres or greater.” All conservation easements resulting from community solar development will be permanent easements.

☀ What happens with the area used to access the community solar facility if the solar panels are not sited fronting a public right-of-way?

Zoning Code Section 158.153(E)(1)(c) says “A CSEGS and all associated infrastructure shall be limited to a maximum of 20 acres on any remaining portion. There shall be no variance to this provision.”

The land area used to access the solar facility is considered part of the associated infrastructure. This area, therefore, would count toward the maximum area of 20 acres. However, as this area is needed for access to the community solar facility, it would not be included in the easement. This access would also be available for future uses on that area if the community solar facility were to be removed.

☀ Can an accessory dwelling unit be built on the portion of the property under easement?

An accessory dwelling unit may be added to the principal dwelling on the property. The size is limited to 1,000 square feet. **Detached** accessory dwelling are required to be located on lots at least three acres in size and may not be located more than 50 feet from the principal dwelling. All accessory dwelling units must meet the requirements of Zoning Code Section 158.071.02(A)(8).

☀ What else is included in the easement agreement?

A draft sample conservation easement template is available on the [Community Solar Zoning Text Amendment webpage](#). The actual easement agreement is prepared by County staff after the final site plan is approved by the Carroll County Planning & Zoning Commission and signed at that time. ☀

Aggregated Net Energy Metering (ANEM)

ANEM is a form of meter aggregation and is defined under the State’s [COMAR 20.50.10.07](#) and subject to the general net metering requirements under [COMAR 20.50.10](#). ANEM allows non-profits, local governments, and agricultural operations to apply energy generated from a solar facility to multiple meters on one electric utility account. In Carroll County, this type of solar facility now is permitted to be developed on remaining portions, subject to all the same requirements and conditions of a CSEGS. A person viewing the facility would not be able to tell the difference by looking at it. ☀

Site Plan Requirement

All CSEGSs are required to submit a site plan for review and approval by the Carroll County Planning and Zoning Commission.

Plans are submitted through the Carroll County Bureau of Development Review. Staff reviews each project to assure compliance with all Federal, State, and local laws and make a presentation to the Planning Commission on the merits of the project. The Bureau also coordinates the monthly meeting of the Technical Review Committee (TRC), which is attended by all review agencies, the developer, and the project engineer. These meetings are open to the public with an opportunity for input from any interested party. Information about TRC meeting dates is available on the Development Review website at www.carrollcountymd.gov/development-review. Once the site plan package is considered complete, it will move on to review by the Planning and Zoning Commission.

If a solar developer does not plan to initially develop the full two MW, but the site *can* accommodate up to two MW of panels, additional area can be reserved for expansion up to the two MW cap. To do this, the area for expansion must be shown on the initial site plan and approved by the Planning Commission. The CSEGS cannot exceed the two MW cap nor the 20-acre maximum area for the facility and its associated infrastructure. ☀

Environmental Resources

To protect Carroll's natural resources, a CSEGS will be prohibited from being located within or impeding a stream buffer, floodplain, or wetland—as defined by or referred to in the **Carroll County Code**. No forested areas, as defined in §150.20, shall be removed from the site for installation of the facility. CSEGS development will be required to comply with all other applicable requirements of the County's environmental codes. A variance may not be requested. Compliance is generally reviewed and confirmed through the site plan approval process. ☀

Bulk & Height Requirements

The entire CSEGS must be setback a minimum of 40 feet from the property line along an adjoining street or from adjoining property lines. A variance to this provision may not be requested. Ground-mounted systems may not exceed a total height of 15 feet above existing grade. The Planning Commission may approve an adjustment to the maximum height if deemed necessary for purposes of the proposed agricultural use, as defined in §158.002. The proposed use and purpose must be submitted as part of the site plan. The Planning Commission may impose conditions on the use if the maximum height is modified. ☀

Abandonment & Decommissioning

A decommissioning plan for ground-mounted systems must be submitted to ensure that the CSEGS owner or operator properly removes the equipment and facilities upon the end of project life or after the useful life. The solar panels must be decommissioned if they are not in use for 180 consecutive days. The decommissioning plan shall include provisions for the removal of all structures and foundations and their proper disposal, the removal of all electrical transmission components, the restoration of soil and vegetation, and a soundly based plan ensuring financial resources will be available to fully decommission the site. The County will also require the owner or operator to enter into a public works agreement (PWA) with the County to ensure proper decommissioning. The PWA shall include provision of a satisfactory bond or guaranty to the County Commissioners to ensure compliance with this requirement and the provision of related public improvements, adequate landscaping, screening, site access, or other treatment as required by Chapters 158, Zoning, and 155, Development and Subdivision of Land. ☀

Process for Solar Developer Approval to Develop Community Solar on Eligible Remaining Portions in the Agricultural District

Step 1: Eligibility Verification

Verify the property is eligible for community solar development under Carroll County Chapter 158, Zoning.

- The property is zoned "A" Agricultural District, AND
- The property is a remaining portion five acres or greater in size.

Step 2: Maryland Public Service Commission (PSC) Approval

Apply for approval from the PSC. A Subscriber Organization (the solar developer) must be approved by the PSC and receive a Subscriber Organization identification (ID) number to build a CSEGS in Maryland. The PSC must also approve the specific proposed project. Visit the [PSC website](#) for more information.

- PSC approval as a Subscriber Organization, AND
- PSC approval for specific proposed project, AND
- Subscriber Organization ID number.

Step 3: Utility Company Approval

Submit an Interconnection Application with utility company (in Carroll County... [BGE](#) or [Potomac Edison](#)), in accordance with [COMAR 20.50.09](#), and apply for capacity within the pilot program, in accordance with [COMAR 20.62](#).

- Interconnection Approval, AND
- Utility approval for capacity in pilot program.

Step 4: Site Plan Approval & Easement Agreement

After receiving the necessary approvals from the PSC and the utility company, submit to the [Carroll County Bureau of Development Review](#) a site plan for review and approval by the Carroll County Planning and Zoning Commission. *Prior to submitting a site plan, all applicants must schedule a pre-submittal conference with Development Review staff to review the development plan proposal.*

The Bureau is the lead agency in the review of site plans in Carroll County, including plans for CSEGSs. The Bureau is responsible for processing and tracking development plans from submittal through approval. The charge of the Bureau is to facilitate the review of each project to assure compliance with all federal, state, and local laws and present it to the Planning Commission. The Bureau coordinates the monthly meeting of the Technical Review Committee (TRC), which is attended by all review agencies, the developer, and the project engineer. The TRC meeting is open to the public, with an opportunity for input from any interested party. The easement agreement is prepared by County staff as part of this process, occurring after site plan approval.

The [Bureau of Development Review website](#) provides information and links regarding the process, review fees, checklists and forms, meetings dates and agendas, and more. See Page 16 for contact information.

The entire process—Steps 1 through 4—typically takes a minimum of 18 to 24 months to obtain all approvals. ☀️

Site Plan Submittal, Review, & Approval Process



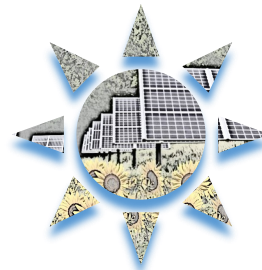
Blue boxes indicate review and approval by the Planning Commission.

Additional Information & Resources

Carroll County Code of Ordinances, Chapter 158 Zoning, §158.153(E) Solar Energy Generating Systems, Community solar energy generating systems (CSEGS) in Agricultural zones

To read the specific zoning provisions and requirements related to Community Solar Energy Generating Systems in Carroll County, review Chapter 158 Zoning of the Carroll County Code of Ordinances.

- ☼ **Community Solar Energy Generating Systems (CSEGS):**
§158.153(E) Solar Energy Generating Systems, Community solar energy generating systems (CSEGS) in Agricultural zones
- ☼ **Definitions:**
§158.002 Definitions
- ☼ **Uses Permitted in the Agricultural District:**
§158.070 “A” Agricultural District



Becoming a Community Solar Subscriber in Carroll County

The Carroll County Environmental Advisory Council (EAC) developed a guide to help Carroll’s citizens understand community solar and learn how to become a subscriber. If you are interested in becoming a subscriber, check out this publication, *A Guide to Becoming a Community Solar Subscriber in Carroll County*, at <https://www.carrollcountymd.gov/media/10194/comm-solar-guide-2019-sep.pdf>.

Environmental Advisory Council Solar Publications

For more information on community solar energy generating systems (CSEGSs) in Carroll County, please check out the Carroll County **Environmental Advisory Council’s (EAC) Community Solar webpage**. In addition to *A Guide to Becoming a Community Solar Subscriber in Carroll County*, the EAC’s report to the Board, *Community Solar in Carroll County*, is available on this webpage. Links related to other information related to solar in Carroll County can also be found here.

The Farmland Owner’s Guide to Solar Leasing—Ohio State University Extension, August 2019

While the first chapter of this guide is specific to the State of Ohio, the other chapters provide **good information that property owners need to consider before signing a lease agreement** with a solar developer.

https://farmoffice.osu.edu/sites/aglaw/files/site-library/Farmland_Owner's_Guide_to_Solar_Leasing.pdf



For More Information

See the list below of topics and who to contact to direct you to the appropriate person to assist you with more information related to developing a community solar facility in Carroll County. ☼

Topic	Person to Contact	Email	Phone
Community Solar Zoning Text Amendment	Brenda Dinne Special Projects Coordinator Land & Resource Management	bdinne@carrollcountymd.gov	410-386-2140
Specifics Regarding Zoning Code	Jay Voight Zoning Administrator	jvoight@carrollcountymd.gov OR cczoning@carrollcountymd.gov	410-386-2980
Site Plan Process & Approvals; Verify Remaining Portions	Laura Matyas Bureau Chief Development Review	lmatyas@carrollcountymd.gov OR DevelopmentCoordinators@carrollcountymd.gov	410-386-2722
Permits for Solar Facilities	Carroll County Permits & Inspections Bureau	PermitsInquiry@carrollcountymd.gov	410-386-2674
Environmental Advisory Council	Brenda Dinne Secretary/Staff Liaison Environmental Advisory Council	bdinne@carrollcountymd.gov OR eac@carrollcountymd.gov	410-386-2140 OR 410-386-2506